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## Sanitation in a Flooded Area

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### I

THE normal title of this paper or discussion is laid on as "Sanitation in a Flooded Area". It is felt, however, that this assembly may be more interested in hearing the factual story of a situation which, within the limits of its broad implications, served as an object lesson in so far as the necessity for an adequate establishment of trained sanitation personnel is concerned.

#### *Locale*

As many of you are aware, the Red River (Red River of the North, as our American friends call it), enters the Province of Manitoba near the Town of Emerson. Some 70 miles north by road lies the metropolitan area of Greater Winnipeg. Further north again, the Red flows into Lake Winnipeg.

The Red River Valley in Manitoba is essentially an agricultural area; the flat prairie land, with its alluvial silt deposits, provides typical acreage for wheat and other grain crops. At one time the entire area in question probably formed part of the glacial Lake Agassiz.

South of the International Border, we find that the river basin boundary extends an additional 1600 miles or so through the States of Minnesota and North Dakota, and into the northernmost portion of South Dakota. However, that area which may directly affect the action of the Red River in Manitoba is probably limited to some 400 miles south of the International Boundary; an area replete with tributary streams and sub-basins of substantially sized lakes, such as the Upper and Lower Red Lake in the East, and Devil's Lake in the West.

*Presented before the Sanitation Section at the thirty-eighth annual meeting of the Canadian Public Health Association, held in the King Edward Hotel, Toronto, June 12-14, 1950, in conjunction with the first meeting of the Ontario Public Health Association.*

### *Historical*

Floods are not new along the Red River Valley; but the causes of these irregular disruptive flows have been complex enough, up to now, to defy adequate forecasting. One reason for this is that not only must the rainfall and equivalent snow cover be integrated with soil and weather conditions for at least twelve months previously, but unless there is fair and reasonable information on the current weather at the time of the annual spring runoff, the basin is so large and so flat that estimated runoffs may vary as much as 200 per cent.

Outside of the Royal Alexandra Hotel in Winnipeg is an interesting relic—the first steam locomotive to run West of the Great Lakes. Inside the same hotel, in the main dining room, the walls are decorated with murals depicting some of the early historical events and sites of the province. One of these murals shows the Townsite of Upper Fort Garry, near the junction of the Red and Assiniboine Rivers, in or around the year 1826. Underneath the script relates how the waters rose, between May the 5th and the 21st of the month, some 16 feet, and did not recede to the original channel until the 14th of June. In the flood of 1852, the waters surged outside the normal boundaries again, and while the height reached was not so great as in the earlier flood, the destruction was correspondingly greater, due to the larger extent of the built-up area in the settlement. In those days, the settlers fled north to the rocky outcrop known as "Stony Mountain", now the site of a Federal Penitentiary, and east to an area of present-day gravel quarries—"Bird's Hill". In the last century, various other severe floods have been registered, notably in 1896 and again in 1916. In the latter year, a steamboat of the stern-paddle-wheel variety actually came up the main street of the Town of Emerson.

### *Current Flood*

In 1948, a forewarning of the present situation occurred; the river again overflowed its banks, inundating Emerson, Morris and St. Jean Baptiste in the Valley, and causing severe flooding in some parts of Winnipeg in the suburbs. However, the maximum height recorded at the main gauging station in downtown Winnipeg was 23.4' above datum—datum being an arbitrary elevation of the winter ice surface of the river. This year the water rose some 7 feet higher. This may not sound so formidable unless one stops to realize that the difference in elevation of many major portions of the City did not exceed 10 feet. In other words, Winnipeg is just about as flat as the prairies which surround it.

Flood level in the City—i.e., the height at which the water leaves its normal channel, is 18' above winter ice level. In 1948, the additional 5 feet of flood water represented all along the Valley a greatly expanded sheet of moving river. In fact, in some places, the stream was 10 miles wide. In the present year, the situation was aggravated to such an extent that, on the basis of aerial reconnaissance, it was estimated that the normal river between Emerson and Winnipeg, instead of being a contained water course 120 miles long and, possibly, on an average, 300' wide, had expanded to cover an area of 720 square miles.

Due to slight elevations—topographical barriers in the flat prairie land—the degree of enlargement of the normal river was not uniform, resulting in the

formation of various temporary lakes. The most notorious of these was the so-called "Morris" Lake, which is said to have been at one period over 20 miles wide. Later, a second body of water known at first as "McGillivray" Pool, and then, later, as the "LaSalle" Lake, provided a real and psychological threat to the inhabitants of Southern and Central Winnipeg.

In 1948, the peak of the flood continued for only a few days, then dropped rapidly. This year, at Morris, for example, the water has stayed at an average elevation 3 feet higher than the 1948 crest for five weeks. One cannot fail to appreciate the differences between a so-called "flash" flooding, which is a not uncommon incident in many of the smaller communities in Southern Manitoba, where the water rises 3 or 4 feet overnight, inundates most of the settled community, and then recedes just as quickly; and the prolonged effect on buildings and humans of an entire community being almost literally buried under 5 to 10 feet of water for a period of weeks.

In the first instance, public services, utilities and normal business and social activities are subject to a temporary pause—in many cases, no interruption whatever. With prolonged, overall flooding, however, there are the continual removal of goods and effects, animals and cars to new levels of so-called "safety"; the complete disruption of transportation, communications and normal business and farming activities; and, finally, the mass exodus of the human and animal population and the inevitable loss of personal and real effects which can no longer be removed to higher locations. Add to this the damage caused by waves washing against buildings, by floating driftwood, telegraph poles, railway ties, and finally, by other buildings—themselves floated loose from foundations and carried by wind and current against bridges and roads—and you have some idea of the damage which may be sustained in a community such as Morris.

## II

### FLOOD PROGRESS—CHRONOLOGICAL REVIEW

Early in April, Mr. K. G. MacQuarrie, the District Inspector for South-eastern Manitoba, decided that there was a reasonable chance of flooding in the Valley—at least as much as on the 1948 scale.

He made a detailed precautionary survey of the situation, contacting the various Reeves and medical officers, and also the operators of hotels, restaurants, dairies, and food-processing plants.

By mid-month, the Red had started its steady rise at Emerson and Morris, and followed a day or so later at Winnipeg. Between the 18th and 22nd, the water continued its steady climb at the Border, but tapered off further upstream at Morris and in the metropolitan area. This was possibly due to the river widening out as it rose; but, unfortunately, in some quarters, it led to an erroneous impression that the flood might not be too serious.

On the 23rd of April, at Morris the stream started rising again swiftly and continued its sharp upswing until May 13th. At Winnipeg, the same resurgence occurred a few days later, about the 27th of the month. On the 5th of May, it reached a peak  $1\frac{1}{2}$  feet higher than the high water level of 1948.

During these few weeks, the weather had not been too kind, but in all threatened areas the citizens were turning to with a will. Community control centres had been set up; the Red Cross was despatching rubber boots, boats and other supplies to threatened points; and sand bags were being stockpiled for distribution by the Provincial Public Works Department. The Prairie Command Headquarters of the Army placed its resources of manpower, vehicles and supplies at the disposal of the Provincial Government. Army Engineer personnel were supervising some of the dike construction; and the Medical Corps had offered the Department of Health the use of their mobile water purification units, known as "Water Trucks 15 cwt.", with drivers and operators. Through the Area Ordnance Depot, supplies of beds, bedding, water cans and other materials were made available. The two great railway systems were particularly co-operative, spotting tenders and tank cars of potable water at strategic points, and later locating sleeping and dining cars for temporary accommodation wherever requested.

Meanwhile, the District Inspector, Mr. MacQuarrie, had secured the assistance of additional inspectors from local health units, and posted these men at Emerson and Morris to work in conjunction with the local authorities and with the various R.C.M.P. Detachments.

### *Redramp*

On the night of May 5-6, conditions worsened. A heavy rainfall over the whole Valley, with cold and inclement weather, added to the misery of the dike workers. The river resumed a rapid rate of rise, and by the next morning the Army had been placed in charge of the flood fight. During the following few days, Permanent Force personnel were despatched to critical points, both in the city and in the Valley. Many Reserve Units of Greater Winnipeg, including formations from the Army, Navy and Air Force, were called out for emergency service.

In the early morning of the 6th of May, first major loss in Greater Winnipeg was sustained when the Wildwood area of Fort Garry was evacuated and left to be over-run by the river. This was followed by failure of the dams guarding the Municipal Hospitals in Riverview, South Winnipeg, and the inundating of another large residential area. The Greater Winnipeg flood battle continued, with varying success, until the 18th of May, when it became apparent that the water level had reached or was reaching a crest. Here and there strategic retreats were in order, such as relinquishing the control of various bridge approaches; but at all times at least two road routes across the Red River were kept open. At East Kildonan, the dike broke without warning, nullifying the hard work of the local volunteers. Fortunately, the flooding occurred without loss of life.

The most conspicuous example of successful dyking was that of the Norwood area in St. Boniface. At the time of peak activity, under Army Engineer supervision, over 1,000 civilian volunteers, in addition to soldiers, were employed on this structure. The demand for material reached a peak of 50,000 bags and 35 rail carloads of sand per twenty-four hours. At the same time, over 50 pieces of heavy mechanical equipment were in use. The land which this dike protected was, in some locations, as much as 11 feet below the flood level.



### *Valley Flooding*

Meanwhile, the Valley flooding was proceeding, and the normal river stretched to new highs on each side. The slow but persistent rise of the river was possibly even more relentless than the sharp upcurve in the Greater Winnipeg area. The entire inspectoral resources of the Provincial Department were mobilized for service in two zones—one around Greater Winnipeg, and another, including the Valley area from St. Norbert south to the Border. The first zone was placed under the supervision of the Senior Inspector, Mr. M. Flattery, who was also entrusted with the job of securing essential items of equipment for sanitary rehabilitation of property. The rural zone was placed under the supervision of the District Inspector, Mr. K. G. MacQuarrie.

It might be appropriate at this point to mention the great value in the co-operation of major industrial concerns. Large supplies of chloride of lime and other disinfectants and deodorants were placed at the disposal of the Department, without charge. Firms supplying waterworks purification equipment took unusual pains to be ready to augment or replace existing installations. The co-ordination of all gross supplies of chemicals and of large engineering plant resources was handled by Mr. W. M. Ward, the Chemist i/c of the Industrial Hygiene Laboratory.

When it became increasingly apparent that the departmental resources might be inadequate, the good services and offers from other provinces and some cities throughout Central and Western Canada were utilized to augment the staff, with the inclusion of sanitary engineers from British Columbia, Saskatchewan, Ontario, and the Federal Government; and with inspectors from Alberta, Saskatchewan, Ontario, and the City of Toronto and various Ontario health units. Needless to say, the practical effectiveness of the rehabilitation program would have been seriously jeopardized without the whole-hearted co-operation of the visiting inspectors who worked long hours, without question, at whatever job or location was assigned to them. The full impact of the work of this enlarged sanitation group will not be realized until after the entire rehabilitation program has been carried out.

### *Operation Rainbow*

Even while the end of the flood was uncertain, a Civilian-Army Committee had been set up to lay out a recommended procedure for rehabilitation of the flooded areas.

Various sub-committees worked on different aspects of the problem. One of these, under the heading of "Engineering-Sanitation", laid on a suggested procedure whereby roads and highways would be recovered, bridges replaced, flooded premises pumped out, and individual buildings assessed for habitation and business re-use. Along with the requirements for satisfactory sanitary conditions was integrated the matter of necessary inspection for structural soundness and water, sewerage, electrical and other services.

This plan was proposed as a guide for the use of municipalities. It foresaw the resumption of control by municipal authorities, once the Army stepped down after the peak had been reached.

### *Operation Blackboy*

Early in the critical stage, a high-level planning commission was set up by the Army, in co-operation with outstanding civilian personnel, in case it might have become necessary to evacuate a large proportion of the population of Winnipeg. The idea back of the plan would seem to be that if the river level at the James Street Pumping Station reached a high of 32.5' above city datum, which corresponds to a geodetic level of 760', there might be a danger of severe disruption of municipal services, particularly electrical power, which, of course, would have critically affected, in turn, the water pumping stations and the sewerage plant. It is interesting to note that if the river had reached that level at the official gauging station—roughly 2' higher than the peak—the water level at the southern approach to the City would have been as high as 75 per cent of the ground elevations in the City or higher, as indicated on the Survey Department's contour map.

This plan contained provisions for emergency stockpiles of food, for mass evacuation, and for the retention of a sufficient control force to conduct the battle against the flood waters. The entire plan would have been considered as an essential operation on the basis of danger to the health and welfare of the people.

## III

### SANITATION IN THE RED RIVER FLOODED AREA

Since the problems encountered could be considered in terms of urban and of rural environment, it might be as well to discuss sanitation items in relation to

- (a) The Greater Winnipeg area—designated as "Zone I", and
- (b) The Red River Valley—designated as "Zone II".

#### ZONE I—URBAN AREA SANITATION

This might be discussed briefly under the typical headings of water supply, sewage disposal, refuse collection, and general clean-up.

##### *Water*

Possibly the prime requisite was the assurance of a safe water supply. Fortunately, the source of the Greater Winnipeg system is located at Indian Bay, Lake of the Woods, far removed from the scene of the flood. As a precautionary measure, the chloramine dosage at the McPhillips Street Pumping Station (which also provides potable water for a number of suburban areas), was raised so that a residual of 0.7 p.p.m. could be detected at the Pump House. A similar procedure was carried out at the second City Pump Station at James Street, which serves a high-pressure fire line, including some local domestic systems.

Similarly, at the City of St. Boniface plant, which also serves the rural municipality of St. Vital, the dosage was raised and a high chloramine residual maintained. At the present date, the general residual at all three above-noted stations is being maintained at 0.5 p.p.m. At another community which normally draws raw water from the Greater Winnipeg Aqueduct, temporary chlorination was set up, a hypochlorinator being installed for this purpose.

In general, it was felt that, with high chlorine residuals and sustained pressure, there was very little chance of danger from or to the public water supply. This opinion might have been in error if it had been found necessary to close down extensive distribution areas.

### *Sewage Disposal*

The Greater Winnipeg Sanitary District sewerage system continued to function. Certain local misadventures occurred, since the system is of the 'combined' type and dependent for storm water relief on various overflows to the rivers. In addition, some of the outlying municipalities have direct raw sewage outputs to the Red and Assiniboine Rivers. In these areas, and at the storm water relief overflows, it was found necessary to install temporary pumping facilities to keep the sewerage system in operation.

As far as the individual house or business establishment was concerned, some difficulties were encountered, especially where the occupier had failed to plug the basement catch basin. Once this was done, it was necessary to disconnect all rainwater headers, and, even so, as the water table rose, considerable seepage entered the basements. In a few cases, sewers backed up before plugs were installed. Generally speaking, however, by the installation of local pumping units, it was found possible to keep all sanitary conveniences in operation, and to control the inflow rate of seepage. In a few instances, the pressure on the basement floor was deemed dangerous, and the basements were eventually allowed to flood.

### *Refuse Collection*

Scavenging services were temporarily disrupted in some instances, especially when all kinds of trucks were in demand for moving sand and supplies. However, the weather remained cool, insect nuisances did not become critical, and most municipalities were able to resume pick-up services after a two-week layoff.

### *General Clean-Up*

Almost all organized communities decided to adopt some modification of the plan outlined in "Operation Rainbow". Control points were set up and teams, consisting of sanitary, electrical and building inspectors, operated as groups, doing block-by-block checking of all buildings in flooded zones. Where considered necessary, on insanitary grounds, premises were placarded with a red card, later to be replaced by a green one when the building clean-up had been completed to the satisfaction of the Medical Officer or his inspector.

Pumping, flushing, and, in some cases, disinfection procedures were carried out by Fire Department personnel, working block-by-block as the river level fell. This plan of operation met with some difficulty, particularly where residents or owners had locked up individual buildings and left the vicinity. Disinfection and cleaning materials and equipment, including chloride of lime, other disinfectants and deodorants, rubber gloves, rubber boots, brushes, brooms and stirrup pumps, were made available to organized groups by the Provincial Department of Health. Most of the chemicals were donated.

### *Foodstuffs*

Condemnation of flooded foodstuffs was carried out simultaneously with the recovery inspectoral program. Receipts for materials condemned were supplied by the inspectors to substantiate possible insurance claims. In one municipality, for example, the local Works Department refuse-collection truck and driver was assigned to the inspectoral team. As foodstuffs were condemned, they were trucked away for final disposal.

## ZONE II—RURAL FLOODED AREAS

The problems in the rural areas were not quite as readily soluble.

### *Water Supply*

None of the communities have municipal water distribution systems; only one or two had any local water supply, such as wells. In most cases, the citizens are normally dependent on imported potable water, and during and after the flood, cisterns and storage tanks were generally contaminated. It was found necessary not only to have to import pure water in bulk, but also to set up a daily water delivery service—at first by boat and later by Army tank truck.

### *Milk and Food Supplies*

As long as rail lines held up, pasteurized milk was brought in daily to the communities; later, canned milk was the major source of supply. In some centres, such as Emerson, two-thirds of the population stayed *in situ*, living in the upper storeys of the homes, and food might have become a critical factor without the all-round co-operation of the Red Cross and the transport services. In other areas, such as Morris, the normal population of 1500 people diminished to a mere handful of between 25 and 50. Here, again, the railways with their commissary cars provided an essential service, both to the few people who stayed throughout the flood, and, later, when clean-up crews were organized.

Locker plants, with the exception of one at Emerson, were put out of operation completely. Subsequently, over twenty tons of foodstuffs were condemned. Restaurants were closed when operators were unable to maintain reasonable sanitation standards. Hotels suffered a like fate as soon as the sanitary facilities were found inoperative.

### *Scavenging Systems*

Temporary nightsoil and waste-collection systems were set up, generally, by boat. The problem of the disposal of dead animals and of condemned meat-stuffs was solved by enlisting the co-operation of some of the rendering plants who sent out their trucks as soon as the waters began to recede.

### *Clean-Up Procedures*

While evacuation and return of evacuated personnel were under control by the Red Cross, local community groups were organized to advise general clean-up procedures. Groups of inspectors were sent out to each affected point under the

general supervision of the District Sanitarian, Mr. K. G. MacQuarrie. Where deemed advisable, placarding of flooded premises was carried out.

Accommodation for clean-up crews was provided by the railway companies. Pumps were supplied, on demand, by the Provincial Public Works Department, who also entered into full-swing co-operation in recovering roads and bridges.

Electrical inspectors were sent out by the Provincial Department of Labor, in conjunction with the Manitoba Hydro Commission. As far as practicable, all inspectoral groups worked with the local detachments of the Royal Canadian Mounted Police personnel, which were augmented for the occasion.

As with the urban areas, adequate supplies of disinfectants, deodorants and cleansing equipment were made available to municipal and other organized groups. In addition, the Department of Health published leaflets covering individual subjects and assisted in the preparation and distribution of a First-Aid Handbook for Flooded Areas.

#### *Anti-Typhoid Inoculations*

Under the able direction of Doctor Maxwell Bowman, the Provincial Epidemiologist, all medical officers of health in areas presumed liable to flood inundation were contacted, and arrangements made for early delivery of adequate supplies of anti-typhoid biologics. It is considered that this procedure was essential, both from a real and a psychological viewpoint. The response of the general public at the various clinics set up was particularly gratifying. More than a word of thanks is due to the physicians and nurses who carried out the tremendous detail of work involved.

## The Relationship of the Census to Public Health

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CANADA has an excellent record in the history of statistics. The credit for taking the first census of modern times is claimed by us. It was taken in 1666 for the colony of New France. The manuscript (showing 3,215 persons) is lodged in the Archives in Paris and there is a transcript in Ottawa. Of course, there were so-called censuses in very ancient days, in China and Babylon 3000 to 4000 B.C. Moses also numbered the children of Israel about 1500 B.C. In the first Book of Chronicles we read that "Satan stood up and moved David to number Israel". David's Census, it is written, provoked the divine displeasure and led to a pestilence in which 70,000 perished. Such happenings were surely a body blow for statistics: doubtless the 'questionnaire' was more unpopular in Ancient Israel than among some harassed firms in these modern days. Little wonder the counting of noses was regarded for a long time as a work of the devil. It would appear that the bad reputation lingered for over 2500 years in Christian Europe. As late as 1753 the taking of a census was condemned on religious grounds in the British House of Commons. A member opposed it in these words:

"I did not believe there was any set of men or, indeed, any individual of the human species so presumptuous or so abandoned as to make the proposal we have just heard."

History tells us of censuses in the days of the Greeks and Romans, of the Domesday Book of William the Conqueror, and of the Breviary of Charlemagne in Mediaeval times, but these were primarily for military and taxation levies. Our national registration at the opening of World War II was a more or less parallel example. The census of New France, however, was a true modern census, purely statistical, hence we may modestly assert that Canada was first to make use of the chief statistical engine of modern times, namely, the periodical nominal or name-by-name inventory of the people and their basic characteristics.

The census is part and parcel of the common every-day thinking of the people. All of us use it every day of our life. It is because the census presents the broad human background against which all our other facts are reflected. A good many of us in this respect are like M. Jourdain in Molière's play, who had not heard of prose, and was astonished to find he had been talking prose all his

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life. In Turkey they have considered the census so important that on the day it is taken every shop, every factory, every place of business was closed, the railways ceased to run, and the people were forbidden to leave their homes between 9 in the morning and 6 in the evening while the census enumerator made his rounds.

Man is not only a living soul for the census-taker to enumerate; he is also a money-earner. Dr. Dublin, you may remember, estimated that a male human being able to earn \$2500 a year at the height of his power is at birth worth \$9000 and at 25 over \$30,000. The female of the species is more deadly than the male, but according to Dr. Dublin she is "worth" only half as much. Well, if you work out the value of the population on Dr. Dublin's basis, you obtain figures many times greater than the total for the material tangible national wealth of the country. No wonder Ruskin said "There is no wealth but life".

Since the Industrial Revolution, and indeed before it, nations have tended to lay chief stress on the development of material resources and the creation of wealth. Gradually more thought was given to the greatest of a nation's assets—the people themselves. Today there is ever growing emphasis on care for the health and welfare of the people. Because this is so, the census becomes increasingly important, for it is a decennial stocktaking of the people and many of their characteristics—those which can properly be taken account of in a census. As such it supplies basic information without which public health officers, in common with leaders and students in many fields, would be working in the dark.

My subject is the relationship of the census to public health. Now when one considers the functions of a public health department in these days, they are so comprehensive, they have so many ramifications, that it is difficult to draw the line and say these questions have a bearing on public health and these do not. This is especially so now that public health departments are setting up their own economic research units. Social-security schemes must delve into the economic as well as the demographic aspects of the people. In any event, some general observations on current censuses will interest you.

During the years 1950 and 1951 the world is experiencing census-taking activity on an unprecedented scale. Some forty countries are engaged in this activity. In the western hemisphere twenty-two countries are working co-operatively to take a census of the Americas. This is the first attempt to gather vital economic and social data about the 300,000,000 inhabitants of North and South America at approximately the same census period.

This effort is unique in several ways. It is a co-operative program coordinated by the Inter American Statistical Institute of which Canada is a member and Canada's census experts have participated. While each nation will take its own census and publish the results, a minimum program has been accepted by all, involving the use of certain basic minimum standards as to census questions, definitions and published results. Thus as between countries the statistics will be comparable.

Census-taking in South American countries in the past has varied widely in character. The range is from no census at all through partial and indifferent to adequate efforts. In some the last attempt at a census was from 20 all the way

to 50 years ago. It is obvious therefore that trained personnel capable of taking a census had to be developed *de novo* in some countries. To meet this need IASI and the Food and Agriculture Organization of the United Nations organized classes in which considerable numbers were trained for census-taking.

Special efforts to promote the taking of current censuses have gone farther afield than the Census of the Americas. The latter have the endorsement of the Economic and Social Council of the United Nations, together with its Population and Statistical Commissions, the Food and Agriculture Organization, and the International Labour Office. These same bodies have also strongly endorsed the plan for the World Census of Agriculture which is being promoted by FAO and have urged all countries to take a World Census of Population. The Population and Statistical Commissions have set out suggestions for questions, definitions and procedures, and FAO has done the same thing for the World Census of Agriculture. For this wider effort, training schools were organized in different sections of the world. Dr. O. A. Lemieux of the Bureau of Statistics was loaned for this purpose and instructed for three months in the training centre at Cairo.

These efforts by international organizations to promote census-taking on a world-wide scale spell out the need for reliable evaluations in the human and economic resources of all nations. The high objectives of the various United Nations organizations require, for the formulation of policy to achieve them, a vastly improved record of the population, food and other resources of the nations. While census information in itself cannot yield the solution of the many problems concerned with social and economic welfare which confront the United Nations, these statistical data furnish a basis to which many other facts can be related and appraised. In connection with the vital problem of population versus food supply, an adequate world census would show the national and world production of food through the Agricultural Census and, on the other hand, through the Population Census, the numbers who have to be fed—a basic picture of needs in relation to supply.

It is not to be expected, however, that the long-cherished objective of a world census enumerated according to an internationally recommended plan, complete and comparable as between nations, will be achieved in 1950 and 1951 or for many years thereafter. Nevertheless, through the efforts of international statistical organization, considerable gains in that direction will be achieved in the current census program.

#### SPECIAL IMPORTANCE OF THE 1951 CENSUS OF CANADA

The census which will be taken in Canada in June, 1951, is the most important we have undertaken since the first census of the Dominion in 1871. In the first place, it is at the half-way mark of the century and will give us a measurement of the progress made during that period. It will show us how we compare today in human resources, the greatest asset of a nation, and how the most important of our primary industries—agriculture—compares with the beginnings of a half century of development.

It will reveal many changes as compared with the census of 1941. In the interval we experienced the great cataclysm of World War II, which altered considerably the pattern of our economy. There have been important shifts in popula-

tion as between provinces, and the industrialization of the Dominion was speeded up. The occupations of the people have undergone considerable changes. More and more people became urban, to the loss of rural areas. These and many other trends will be shown in the 1951 census.

The next census will use new techniques. Canada is introducing procedures which may set a pattern for other countries. Owing to the importance of census data and their usefulness for a vast variety of purposes, it is essential that they be compiled with the greatest possible speed and accuracy. In the past it has been a time-consuming process to get out the final results. The increased costs of taking a census make it imperative to find new means of shortening the collection and tabulation processes, thus lowering costs. The Bureau of Statistics has attacked the problem in several ways, a brief description of which may interest you.

1. For the Population and Housing Census the usual cumbersome 'line' schedule into which all information had to be written is being replaced by a 'mark-sense' card for each individual.

In a mark-sense document a question is answered by making a mark in a pre-arranged space instead of writing the answer in full. Special electronic machines read the marks and produce automatically, as an 'end' product, a punched card.

2. The electronic statistical machine, a recent International Business Machines' invention, will be used for the census compilations. These machines are far superior to any hitherto available, not excepting machines which had been invented in the Bureau for use in the 1931 and succeeding censuses and which increased output immensely. The new electronic statistical machines can count and sort at the same time, they permit of a wider range of simultaneous cross-classifications, and are much speedier in operation. The machine processing of documents and punch cards for a Test Census taken last October revealed that the hand editing of documents to correct errors could be eliminated. The electronic statistical machine quickly and accurately rejected punch cards containing errors and indicated in general groups the type of error present on the card. Thus, a much more economical editing procedure is possible.

3. Decentralization will be an important aspect of the coming census. Hitherto all schedules have been returned to Ottawa for editing and processing. In the coming census, six regional offices across Canada will act as sectional centres, controlling the enumeration in their territories and supervising the office processing of returns to the card-punching stage. This change has the advantage of spreading the work of processing returns across the Dominion, and of having the agencies which do the initial processing close to the area covered, where difficulties can be quickly dealt with. Incidentally, some 1500 clerks are required for processing from 3 months to a year, and the housing situation makes it practically impossible to bring that number to any one centre.

#### CONTRIBUTION TO PUBLIC HEALTH FIELD

All people, not only the health officer, are interested in their own health and longevity. It is of importance to everybody that the general death rate in many countries has been nearly cut in two in the past hundred years. Expectation

of life at birth has increased on this continent by eight years since the beginning of the present century. Infant mortality has been reduced to a fraction of its previous toll.

It was statistics that pointed the way to this achievement. Statistics are like the observation balloon or the aeroplane that the army sends up to search out the movements of the enemy. The observer telegraphs back information to the artillery who straightaway know exactly where to train their guns. All the big guns in the world are useless if you don't know where to point them. It was statistics that marked the target for medical science in the long fight against tuberculosis. It is at this moment marking the target in the fight which is going on the world over against cancer. It is exactly the same all along the line. Only by factual knowledge, only by knowing where to point your guns, is progress possible.

The census has often been referred to as a stock-taking of the public health worker, and it is truly said that, together with its offshoot—vital statistics, it provides the yardstick against which the progress of public health can be measured. The population figures resulting from the census and, based on it, from intercensal estimates, supply the denominator for many of the rates you are working with in the public health field, on a national, provincial or local basis. We need the denominator to calculate the rates of mortality and the incidence of certain diseases; we need the information on sex or age of the population in order to calculate not only the crude but also age or sex, specific or standardized rates. Only by means of such rates can we compare conditions over a period of time or between different areas, different groups of the population, and so on. Population is the first one among the facts which it has been said the health officer needs to know in orienting himself to the local problems. "As it is for the people in the area that the health department is created and maintained, it is highly important that the health officer knows with whom and with how many he must deal." He must know the numbers and characteristics of the people in his area.

The number of persons for whom he has responsibility will also be the number to use as a denominator in rates of sickness for his territory, but there is another important reason for local detail on the census. Unless the numbers of population are known in very fine local breakdown, it is not possible to design efficient samples for estimating the amount of sickness in larger areas such as provinces and the country as a whole. A good morbidity sample, like samples for agriculture, labour force and other purposes, must start with data on where people are located.

The uses to which civic officials may put census reports are many and varied, touching upon almost every phase of municipal life. They are indispensable in charting expansion and revision of every public service from water supply systems and sewage disposal plants, police and fire departments, traffic regulation, and health programs, zoning for and building of schools, hospitals and other public facilities. They are used by public utility companies who gear their activity to population rise and fall, and by research workers in the fields of sociology, economics and education. Governments use them in connection with housing and other legislation. Some of the questions in the Housing card are included to assist the Central Mortgage and Housing Corporation.

## NEW INFORMATION IN 1951 CENSUS

New types of information will be available in the 1951 census which will be helpful to public health officials. There will be an improved presentation of the rural-urban distribution of population which, when cross-classified with other census facts, should be revealing. In this census urban elements which have previously been included in rural areas will be taken out of rural and put where they belong.

In addition to the total population counts for all incorporated urban centres, the 1951 tables will initiate a more rational scheme for the rural-urban break than has hitherto been worked out. The new definition is very simple: urban population is that which lives in built-up places of 1,000 population or more, whether incorporated or not. An attempt will be made to secure comparable figures for past censuses and the outcome will be more useful breakdown of census data on perhaps the most fundamental distinction which it makes.

Another important development is the provision for tabulating data by Census Tracts. The principal urban centres of the Dominion have been divided into sections as homogeneous in character as possible. These ordinarily include sections of a city having a population of from 3000 to 6000, selected primarily on the basis of similarity. These small-area concentrations of people whose backgrounds and habits are essentially alike are of great value in the analysis of all types of municipal problems. They provide a basis for location of areas of change that would be obscured in city totals. Used in conjunction with local health department statistics, tract data help in isolating and dealing effectively with health problems, such as a rise in the tuberculosis rate in specific tracts of the city. A rise in the city rate might be due to conditions in a single area of the city, a fact which would be obscured by rates for the city as a whole. Combinations of widely separate census tracts having the same economic status are used for the analysis of many population characteristics such as birth and death rates, incidence of crime, etc., all related to the social and economic life of cities.

## HOUSING CENSUS

A special card will secure information which will give a comprehensive picture of the housing conditions of the people, as will be seen from the following list of questions:

- Tenure
- Rent
- Mortgage status
- Year household occupied the dwelling
- Type of structure
- Number of dwellings in the structure
- Principal exterior material
- Is this dwelling in need of major repairs?
- Number of rooms in dwelling
- Water supply
- Bath facilities
- Toilet facilities
- Principal lighting facilities
- Refrigeration facilities
- Principal cooking facilities
- Principal heating facilities
- Equipment
- Fuel

Supplementary heating facilities

Equipment

Fuel

Living conveniences

Powered washing machine, electric vacuum cleaner,  
telephone, radio, automobile.

Of course, we should like to get even more information for you through the census but it has definite limitations. If we included all the questions we have been requested to do, we should add probably a couple of million dollars to its costs. Apart from cost there are very sound reasons why the questions must be as simple as possible and limited to basic facts. The task of securing 18,000 enumerators precludes the possibility of setting high educational standards. It also necessitates a short training period. The questions asked must therefore be limited in number and complexity to what the enumerator can absorb in the limited training period. Moreover, numerous questions lengthen the time schedule and slow up the compilation of results.

Another important limitation is the fact that in many cases it is the housewife who must answer the questions. It would be an impossibly long process for the enumerator to see every member of the family personally. Consequently, the questions must be framed to take account of that fact.

There are many questions which are appropriate for a sample survey conducted by more highly trained enumerators but not for the regular census. We hope to supplement the census by such a sample survey, in which information will be sought on a few complicated questions. Another use of sampling will be a check on the accuracy of ordinary enumeration by specially trained enumerators from our Sampling Organization.

The Bureau of Statistics is an objective fact-finding body and we do not, as a rule, go into the field of forecasting. However, there are good grounds for predicting some probable results of the census. It will show a continuation of the trend towards an aging population. It will be interesting to contrast the shape of the age pyramid of 1951 with that of 1941 at both the upper and lower age classes. The proportion of males under 5 years of age decreased in Canada from 18.6 per cent in 1851 to 9.0 per cent in 1941. It will likely be higher in 1951. The proportion of the male population 70 years of age and over rose from 1.8 in 1871 to 3.9 in 1941—it will likely be larger in 1951. The figures will be of significance in view of the lowering of death rates and the long-term trend to lower fertility, which latter has shown at least a temporary reversal. It will be of importance from the old-age pension point of view, since the 1941 census showed that the proportion of men over 65 years of age who are among the gainfully occupied is rapidly decreasing. Females showed an even more striking rise in older ages, the proportion 70 years and over more than doubling in a 70-year period—from 2.0 per cent in 1871 to 4.1 per cent in 1941. It is safe to say, too, that our population will be shown to be more urbanized and that industrial occupations have gained on agriculture.

You are familiar with the rapid changes in mortality which have taken place among certain groups of the population and whose full analysis depends on the census and population estimates based on the census. During a recent (1937-46) 10-year period the deaths per thousand women aged 30-34 years dropped from



3.7 to 2.1 and this is typical of other ages between 20 and 40—the reflection of declining maternal mortality. Infant deaths show an almost equally sharp decline from an average of 93 in 1926-30 to 47 in 1946. Such facts will be brought out in life tables to be prepared when 1951 census results are known.

The rise in the birth rate which started during the war and continued into the post-war period has taken the experts by surprise. Full analysis of the result requires order-of-birth statistics together with numbers of women who in the quaint actuarial expression are “exposed to the risk” of having first, second, third, etc., children. As a rough indication of the vast change in family patterns, the number of first children born increased from 48,000 in 1933 to 114,000 in 1947, while 5th children hardly increased at all and all orders higher than the 5th showed a decline. The changed family pattern will be analysed by age, occupation, locality, etc., in the extensive family tabulations planned for the 1951 census.

You may rest assured that we are doing everything in our power in the Bureau of Statistics to achieve the maximum possible completeness and accuracy in the next census and we are very hopeful of getting out the results in record time. We shall do our part, but we cannot do all. No matter how careful our preparations are, they will not suffice if we do not have the co-operation of the public. This will require the help of officials in many walks of life in creating a public consciousness of the value of the census and the necessity of answering the questions fully and accurately. Later on we shall have an educational and publicity campaign. In your own interests and for the public good I hope you will assist us.

## Letter from Great Britain

# The Medical Officer of Health in Great Britain

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THE Medical Officer of Health in Great Britain celebrated his centenary in 1949, dating from the first appointment in Liverpool. This notable event almost coincided with the coming into operation of the National Health Service Act, which made profound changes in the work of a Medical Officer of Health, about which I have already dealt at some length in previous letters. I shall not go over the ground again but shall seek in this letter to deal with the principles which should govern the work of a Medical Officer of Health in the preservation of community health.

The application of these principles must not be confused with the question of forms of government. Parliament must decide how the health service shall be governed. It is obviously desirable that the services for health should be run as one integrated whole, since there can be no real dividing line between curative and preventive medicine or between the work of hospitals, general practitioners and medical officers of health. But if it is decided to have a divided service, as in Great Britain today, this makes no difference to the principles which should operate in the work of a Medical Officer of Health to preserve the community health. Medical Officers of Health here are not seeking to return to past administrative arrangements but are looking forward to the future in which they are confident that whatever the administrative structure it is possible to make adjustments to secure a due regard for community health as an entity.

A unification of health services under one jurisdiction may be desirable but there is an equal, if not greater, need that the mind of the ordinary person should be focussed upon the importance of preserving and promoting community health rather than upon curative medicine. Medical teaching has always emphasized the microscope and the post-mortem room and the paraphernalia of curative medicine to the exclusion of teaching in social medicine; preventive medicine lacks much of the drama and glamour of curative medicine; it is an abstract idea, difficult to comprehend and rarely showing an immediate economic return. The Medical Officer of Health can accomplish much by enlightening the public mind on such matters and by emphasizing in his development of the community health services the essential unity of curative and preventive medicine.

The most important need now is for a uniform approach to the problem of community health, which our legislators have so long failed to grasp. From the early years of public health to modern times the field of work of the Medical Officer of Health has been divided up, making it difficult, if not impossible, for him to comprehend the whole subject of health in his area, as well as involving duplication and overlap, with consequent waste of effort and loss of money. The body corporate has had its organs and limbs separately considered, diagnosed and treated as if they had no relation to one another. Community health is as much a subject for unified approach as is individual health. Both are in danger from over-specialization.

This unity should be recognized by statute, for it is as vital to national as to local considerations. Parliament often fails to direct authorities with whom responsibilities rest. Legislation should state (as it has in the case of mental health under the National Health Service Act) that the work in relation to community health should be carried out under the general direction of the Medical Officer of Health. The Medical Officer of Health must be regarded as the guardian of community health with full statutory support to apply medical and scientific principles to the eradication of disease from his community in every way that modern knowledge permits.

His duties must entail the organization and executive control of many services; some wholly medical in the sense that they are concerned entirely with the practice of medicine (for example, the school health service), and others partly medical (as the ambulance service), included because their whole purpose is to serve the ends of medicine. While he must be responsible to his authority for the co-ordinated operation of an integrated service to protect community health, delegation is possible to medical and non-medical staff with special qualifications and/or experience; thus, he should be assisted in his arrangements for the care of the deprived child by a children officer, whether doctor, nurse or university graduate; in the ambulance service by a lay administrator with appropriate training, and in services for the handicapped and aged by someone with special knowledge of social activities and handicrafts. Delegation of functions should be a natural part of the overall medical control, which is of paramount importance.

He should be a leader of a team of professional men and women trained and practised in the application of preventive and social medicine: doctors, dentists, health visitors, home nurses, midwives, sanitary inspectors, health education officers, statisticians, welfare officers, children officers, psychiatric social workers and other mental health workers, V.D. health visitors, etc. He should be in a position to co-ordinate their common task of protecting the community health.

It has been a common fallacy here to suppose that machinery devised to deal with health problems can be adequately served by independent advice. The provision of such advice is essential to the proper conduct of the community health services, but when it operates in watertight compartments much of its value is lost. What is most needed today is to secure that the Medical Officer of Health co-ordinates all medical advice on community health problems and arranges that the total resources of the health department shall be brought to bear on all problems of social medicine. Thus, it is certain that all community health services,

for example, industrial health, the care of the deprived child, the care of the aged, should be organized not as independent administrative units but under the general direction of the Medical Officer of Health. How far this fact is from being accepted can be seen in the Children Act and the National Assistance Act. We are awaiting with anxiety the result of the deliberations of the Dale Committee (before which we gave evidence), which has been established to consider the establishment of an industrial health service.

The Medical Officer of Health must undertake whatever duties the protection of community health may call for, whether these take him to the office desk or the committee room, to the homes of the people or its schools and factories; this may impose upon him duties in administering institutions necessary for the protection of community health; it may require him to have special knowledge of clinical medicine, such as fevers. No other boundary to his work should be recognized.

The protection of community health also requires that the Medical Officer of Health should be assisted by all the developments of modern medicine in the form of specially staffed diagnostic clinics, specially equipped institutions for priority classes, and by the assistance of various specialists in different branches of the profession. Whatever may be the division of responsibility for different aspects of our health services, machinery must be devised to ensure that the Medical Officer of Health is in a position to make the most effective integration of such special services.

It is important to draw a distinction between various types of institution. Certain of these are primarily designed to safeguard community health, as distinct from being mainly concerned with the treatment of the individual. Maternity homes for normal midwifery, sanatoria, fever hospitals, mental deficiency colonies, certain specialist and diagnostic clinics (as in the school health service), and mass radiography, are concerned mainly with protecting community health; in a divided health service the Medical Officer of Health must be given such authority in relation to the provision and use of these institutions as will ensure that their primary purpose of safeguarding the community health is guaranteed. The force of this has recently been demonstrated in Glasgow where, owing to lack of co-ordination between the fever hospitals and the health department, the smallpox outbreak assumed an unfortunate degree of severity.

The Medical Officer of Health must also play an active part in planning curative services, most if not all of which are intimately bound up with services for the prevention of disease. Particularly is this so with the many aspects of curative medicine which call for integration with other social services as, for example, care and after-care, home nursing, and the care of the chronic sick. He must, therefore, be given direct representation on any governing bodies which deal with the curative services. His work in this respect would be assisted by the appointment in each region (or other chosen unit) of a committee (with adequate powers) to study integration and so promote a proper balance between curative and preventive services.

The Medical Officer of Health is a specialist in problems affecting the community health; as such he is concerned with social medicine as a discipline

affecting the community as a group of individuals. His work must include the operation of two types of services—those (the earliest to develop) which affect the environment in which the community lives; and those more recent services which have the individual as their objective; not the individual sick person as such but, in contrast, the individual as a member of a class of susceptible persons whose safety and health are of importance to the protection of community health. The latter is the growing point of what may be called 'executive social medicine'; the services for the susceptible groups—the mother and her young child, the school child, the tuberculous, and those with venereal disease, were its first fruits; we see today the addition of new groups of susceptibles—the deprived child, the handicapped, the aged, the chronic sick, the factory worker.

Community social medicine places the Medical Officer of Health in a doctor-community relationship similar to, but distinct from, the doctor-patient relationship of a family or hospital physician. The two relationships are complementary. The Medical Officer of Health must study and understand the community in all the intimate details of its life, as a family or hospital physician would study his patient, and he must be in a close personal relationship with those responsible for people in sickness. Executive social medicine requires the closest attention to detail; the Medical Officer of Health must be in a position to get down to basic facts of community life. Wherever there is a weak link in the chain of causation of disease and ill-health, he must apply pressure to break it; he must strike at the root of disease by changing the living conditions and habits of the people.

The working unit for a community health service of this detailed and intimate character must clearly not be too large; many would consider a population of 100 to 150 thousand as a reasonable upper limit, with variations below this to meet the differing circumstances of geography and industry. The staffing of these units in Great Britain (operating either singly or, alternatively, in groups under a larger community health authority) would entail between 500 and 750 whole-time Medical Officers of Health; approximately one to every 30 to 40 general practitioners, and one to every 4 to 6 specialists in the varying aspects of curative medicine. The use of this number of whole-time specialists in community health is essential to knit together the two important fields of curative and preventive medicine and is thus seen to be in balance with the use of doctors in the other fields of work.

It is essential to place the community health service in a true perspective and to avoid undue emphasis upon curative medicine. It is certain that an emphasis on health and on the community, and the full application of medical knowledge to the ills of society, will be harder to achieve within an administrative framework which has established large, powerful, State-supported boards to manage hospitals and specialists, and which leaves the management of health to the now relatively small authorities of local government deprived of many of their weapons. The regionalisation of curative medicine has swung the balance of power so violently towards curative medicine that many believe a similar regionalisation of public health to be the only means of solving the new problems with which it is faced.

Such a step would have serious implications. Local government, with its many gradations of size and variations in autonomy, has ministered well to the Englishman's aptitude for experiment, his desire for trial and error, and his empirical mind, particularly in the public health field. Few can doubt that preventive medicine in England has reached its present high state of development mainly because authorities guided by medical men with a specialist training in preventive medicine—thinking and planning for the needs of society—have been financed by a local rate and have therefore been able to take the initiative. Today it is more than ever necessary that the specialist in community health shall be given a free hand to develop his art.

Another obstacle which will have to be overcome, if public health is separated from local government as we now know it, arises from its close relation with other social services, such as housing and sanitation. No doubt these difficulties could be met by supplying the necessary public health advice to local authorities under a scheme of divisional administration. Even greater difficulty would be encountered in the school health service, which is an integral part of the education service; but even this difficulty could be overcome. The school health service must remain part of the school system, and it would be necessary to resist strongly any suggestion that some inspection, somewhere else and in some other manner, could be substituted for it. This would be attended by grave disadvantages; the the gospel of 'School and Life'\* is I believe irrefutable—school teacher, school nurse, school doctor, school child, and parent in conclave, if necessary, together. Accordingly the work must be done on school premises, in school time, and by school doctors who give their time without other commitments. Special schools for delicate, deaf, blind, and other handicapped children should remain with the education committee. With this principle securely held, the school health service could be retained as an integral part of public health, from which it has so much to gain, and could be regionalised with the rest of public health.

Some will say that the remaining health functions should be transferred to the regional boards. But the outlook of the clinician, who occupies more than a third of the seats on the boards, is centred upon the individual, even when he is imbued with the new spirit of social medicine. The outlook of the Medical Officer of Health centres upon society. If then local government in health, after a glorious reign, is now to be deposed, let not the throne be occupied by those who know not. Let there be a complete recasting of the administrative framework. If this is to be centred on regional areas, let there be new authorities, locally elected and with the inestimable advantage of a local rate, and let them have a medical officer of health with equal power to speak his mind in official reports and in public writing and with duties and responsibilities in no way subordinated to curative medicine.

Such an arrangement would have to meet the criticism that there would be two separate authorities dealing with medical matters in each region. It is impossible to deny the force of the argument that the health services demand a unified administration if they are to be an economic proposition, and it is a fair

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\*Report to the Minister of Education by the Central Advisory Council for Education (England). H. M. Stationery Office, 1947.



inference that such unification is now possible only at regional level. Nevertheless, there are powerful reasons why the present regional boards are not suitable organs for such a unified control. Chief among these is the fact that regional boards are chiefly concerned with the cure of sickness, in hospital; if, with their present constitution, they were to absorb the preventive services it is likely that public health would suffer.

The only type of hospital which has so far been made almost wholly redundant—the first I hope of many—is the fever hospital, the creation of the Medical Officer of Health. As we work we continually remove the causes for our own employment and that of the auxiliaries of our own creation. But to argue that the Medical Officer of Health is no longer needed is blind complacency. It presumes that society could not retrogress, as it does that society is now so perfect that it cannot advance. This is nonsense. There are plagues enough still with us. What of the degenerative diseases—cancer, arterio-sclerosis, diabetes—which take an increasing toll? Old age has still to be made a healthy, happy, and useful period of life. What of the hospitals themselves and the crowded out-patient departments? What of the infants who still die uselessly, to the shame of a modern society? What of the problem families and the homeless children, and the smoke and slums which still mock our efforts to create a healthy community of healthy families? Some time the day will dawn when society no longer needs the Medical Officer of Health, but until that day comes it behoves this country to fight for his preservation as a free agent.

The duties which must fall to a Medical Officer of Health in the application of these principles require that he shall be fully and adequately trained. To give him his proper place in the new order of things he must be accorded specialist status. The graduate who elects to make community health his life work should now be required to proceed through a five-year training at Registrar status, as recommended by the Spens Report for other specialists. This five-year period should, of course, be appropriately designed to include the present Diploma in Public Health (with such modifications and extensions as new disciplines indicate); together with a year's work in a Nutrition Institute, a physiology or other department engaged in work fundamental to a sound understanding of preventive medicine; a year spent in the study of infectious disease, including tuberculosis and venereal infections; a year in a recognised health department; and a year in approved study abroad. The study of child health should be accorded a special place in the curriculum. The selection of candidates for such registrarships should be given special consideration.

If these principles can be accepted, I see no reason why the Medical Officer of Health in Great Britain should not play a part in his second centenary of life as great as that accorded to him in his first, or greater. With his help, Great Britain might yet progress to a society as far removed from that of today as ours is now different from the time a century ago when Southwood Smith and Lord Shaftesbury walked together in the slums of Bethnal Green. I hope to deal with the details of the work of the Medical Officer of Health in a further letter.

## Eugeria

SIR JAMES STIRLING ROSS, K.B.E., C.B.\*

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THIS short article is a layman's contribution on a point of medical terminology.

Some time in 1948 Professor Leslie Banks, then a Senior Medical Officer of the Ministry of Health, discussed with me the use of the term Euthanasia (*εὐθανασία*) in Classical Greek and Latin. It was in that connection that I came upon a passage in Aristotle's *Rhetoric* (Book 1, chapter 5) which I had known fifty years earlier and had forgotten. It has a considerable intrinsic interest and I give a literal translation of it below.

The passage deals with happiness (*εὐδαιμονία*, *endaemonia*), health (*ὑγίεια*, *hygieia*), and well-being in old age (*εὐγηρία*, *eugeria*), and it is for the last of these terms that I am quoting it. The whole passage is a characteristic example of Aristotle's masterly power of quiet and logical analysis of words and ideas. It runs as follows:

"Let us grant that happiness (i.e., the good life) consists in well-being with virtue, or in self-sufficiency of life, or in the life that is most pleasant and secure, or in abundance of possessions with the power of defence and exercise. Doubtless all would agree that one or more of these elements constitutes happiness.

"If then happiness is of that general character, it follows that its parts (or elements) consist of good birth, many friends, trusty friends, wealth, good offspring, many children and a happy old age [*eugeria*; literally, well-being in old age]: it implies also the physical qualities such as health, beauty, strength, bigness, active muscular power: also reputation, honour, good-fortune, virtue. For thus equipped a man would be most self-sufficing, if he should have these inner and outer goods: and there are no other things that matter beyond these. . . .

"Health (*hygieia*) is that virtue of the body by which we exercise our use of our bodies free from disease. . . .

"*Eugeria* may be defined as slowness in the oncome of old age, with freedom from pain. You cannot call a man happy in his old age either if he ages quickly or if he ages slowly but with pain. *Eugeria* comes from the virtues of the body and from good fortune. A man may be free from disease and enjoy physical strength and yet not be free from suffering and pain, and without good fortune a man could not reach to an old age. There is also a certain power of long life apart from strength and good health: for many men are long-lived without the virtues of the body. But a high precision in these matters is out of place in this discussion."

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\*At one time an Officer of the British Ministry of Health.

The suggestion I make is that instead of the ugly and mistaken term "Geriatrics" which has recently crept into medical language, and which incidentally has no classical authority, we should in future use this beautiful word "Eugeria" (soft "g"), straight from the best classical Greek. This word is not only beautiful to the ear: it is also beautiful in its idea. It expresses precisely and scientifically what is sometimes described, and well described, as "ageing successfully".

I know, of course, that geriatrics (the healing of old age) is meant to mean a process, while eugeria denotes a condition (healthy old age): but I am fortified by good medical opinion, and by common sense as well, in protesting that you do not heal old age. You protect it: you promote it: you extend it, but you do not heal it. It is old people that you heal, when there is anything wrong with them: and old age is not necessarily anything wrong with them at all.

My good friend, Professor J. Wyllie of Queen's University, Kingston, tells me that a kindred term, Progeria, has long been in medical use to describe premature ageing of infants. This strengthens my suggestion for the use of the primary term "Eugeria"\* to denote the ideal.

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\*What a fine word, too, for the title of a certain journal which under another name is devoted to the furtherance of this ideal.

# Canadian Journal of Public Health

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## GERIATRICS IN EUGERIA

IN these days when a medical degree means, as Dr. Sidney Smith, President of the University of Toronto, indicated in his Report for the year 1948-1949, little or nothing more than a vocational certificate, we give little concern to words—their derivation, their meaning, or their sound; we rush on promoting our pet projects, satisfied that our words will be picked up avidly by our equally restless fellows and will be understood by them even though they denote something entirely different. It is good for us to be reminded of the errors of our rashness; it may lead to some humility, the end, as Sir Richard Livingstone has pointed out, of all education.

We are fortunate in having in this issue a contribution from Sir James Ross, formerly an Officer of the British Ministry of Health, in which he proposes "instead of the ugly and mistaken term 'Geriatrics' which has recently crept into medical language, and which incidentally has no classical authority, we should in future use this beautiful word 'Eugeria' (soft 'g'), straight from the best classical Greek." We heartily concur with Sir James that "this word is not only beautiful to the ear: it is also beautiful in its idea. It expresses precisely and scientifically what is sometimes described, and well described, as 'ageing successfully'."

If the word "Geriatrics" has already become so firmly fixed by short usage that it cannot be displaced, Sir James' note may serve as a much-needed warning for the future.

# The Canadian Public Health Association 1949-1950

## REPORT OF THE EXECUTIVE COMMITTEE

IN its record of service through the years, the Canadian Public Health Association has cause for satisfaction. Since 1910 it has made available to Canadian health workers a national journal in public health. Year by year the Journal has provided essential information to public health authorities and has increased the prestige of Canada in the health field. From the Association's inception, a national meeting has been provided each year and its deliberations have been reflected in new legislation and in effective planning. Since 1935 the Association, through its Committee on the Certification of Sanitary Inspectors, has worked to raise the status of the sanitary inspector and improve the quality of his services. In the past fourteen years more than six hundred sanitary inspectors have been granted the Certificate in Sanitary Inspection (Canada), which is now accepted as one of the qualifications for full-time appointment. Through the Study Committee on Public Health Practice, whose investigations were financed by the W. K. Kellogg Foundation, an evaluation has been made of the work of the medical officer of health, the public health nurse, and certain other personnel, and important recommendations presented. The Association's voice has been heard on behalf of public health in the hearings on social security of the Parliament of Canada. The Association has endeavoured to present the professional viewpoint to legislative bodies throughout Canada and to represent public health in the professional activities of other societies. It has been active in bringing to the attention of Federal, Provincial, and municipal authorities the necessity for increased salaries and more satisfactory working conditions for those engaged in public health work. Two valuable salary surveys, with recommended salary schedules for various public health appointments, have been published, one in March of last year. To physicians in public health the Association has rendered an important service by pressing for recognition of public health as a specialty in the provisions for certification of specialists made by the Royal College of Physicians and Surgeons of Canada.

It is noteworthy that, since its organization in 1910, the Association, representing the important but numerically small group of professional workers in this field in Canada, has undertaken work which normally would require full-time executive officers and staff and a substantial budget. For three years, from 1946 to 1949, the Association had the services of Dr. J. H. Baillie as Executive Director. Dr. Baillie resigned in October of last year to accept an appointment

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*Reports presented at the thirty-eighth annual meeting of the Canadian Public Health Association, held in the King Edward Hotel, Toronto, June 12-14, 1950.*

in industrial medicine. Apart from the important services which he rendered, the work of the Association has been carried forward by Mr. Robert L. Randall as Executive Assistant, with a staff of two. It must be explained, however, that even without a salaried executive director the maintenance of the Association requires at least \$20,000.00 a year. Public health workers must realize that the maintenance and continued progress of the Association, which is vital to the best interests of public health, requires their full support.

The expanded work of the Association during the years of Dr. Baillie's leadership was made possible by a special grant from the W. K. Kellogg Foundation. This valuable assistance was given for a specific undertaking, the conduct of a study of public health practice in Canada. To make possible the continued work of the Association and to enable it to assume new responsibilities, the Federal and Provincial health authorities commenced three years ago to remunerate the Association for certain services which it is rendering. Recognition of this principle places the Association in its proper relationship to the official agencies and gives promise of the development of a satisfactory method of providing financial support for the conduct of essential new services. It is appreciated that the Canadian Public Health Association is in a position to conduct studies which the official health agencies may desire to refer to it and to provide certain services which the agencies may request of it.

#### *The Study Committee on Public Health Practice*

The report of this committee, which was appointed in 1947 under the chairmanship of Dr. John S. Kitching of Hamilton, was assembled during the year and studied by the committee. It was presented to the Executive Committee at a meeting held on February 14, 1950, and subsequently was prepared for publication. The report is comprehensive and constitutes an important contribution to public health practice in Canada. The survey officers were Dr. J. H. Baillie and Miss Lyle Creelman. At least one urban and one rural area in each province was visited and in the larger provinces more areas were included. The findings therefore relate to nine of the Provinces; Newfoundland was not a province of Canada at the time the study was undertaken. The report will be made available to all the agencies that participated in the study, to the Public Health Survey Committees of the Provinces, and to other interested groups.

#### *Provincial Public Health Associations*

Excellent progress in the organization of provincial branches was made during the past year. The Alberta Public Health Association held its first annual meeting in 1949. At this meeting of the Canadian Public Health Association, the first sessions of the newly organized Ontario Public Health Association are being held. This association carries forward the work of the Ontario Health Officers Association, organized in 1912, and brings to the Canadian Public Health Association new strength and interests. In Quebec a provincial association, the Société d'Hygiène et de Médecine Préventive de la Province de Québec, has been formed and will be host to the Canadian Public Health Association at its meeting in Montreal in May 1951. New Brunswick, Nova Scotia,



Prince Edward Island and Newfoundland are giving consideration to the formation of a Maritime Public Health Association, and the subject of provincial associations is being reviewed in other provinces. The future of the Association as a national body serving public health workers depends on the development of strong provincial organizations which will make possible annual provincial meetings bringing together all those engaged in public health within the province. The national meetings can be held with the provincial health associations in the eastern, central and western areas in turn.

### *Public Health as a Specialty*

The Sub-committee on Public Health of the Committee on Certification of the Royal College of Physicians and Surgeons of Canada, under the chairmanship of Dr. D. T. Fraser, presented to the College a set of training standards which the committee considered desirable for physicians wishing to be certified as specialists in public health. The Council of the Royal College has changed its ruling in regard to certification without examination, and specialists practising public health and preventive medicine on a full-time basis may submit applications to the secretary of the College for certification as a specialist in public health up to December 31, 1950.

The American Board of Preventive Medicine and Public Health, Inc., has accepted several Canadians as members of its Founders' Group and has established several others as eligible for examination. The Board has conducted four sets of examinations, and Dr. Baillie has participated in three of these as Canadian representative.

### *Recruitment of Public Health Personnel*

At the request of the Dominion Council of Health, which is the advisory body of the Department of National Health and Welfare, the Association has undertaken to develop plans for increasing the number of professionally trained personnel required for the expanding public health services of Canada. The situation is critical in several of the Provinces, both in regard to physicians with training in public health and to public health nurses. It is urgent also that in the fields of public health dentistry, engineering and sanitation, an adequate number of suitably qualified persons be trained if the present programs are to be maintained. Many more members must enter the field of public health if health services are to be extended to provide for the needs of all parts of the Dominion.

The assumption of this responsibility by the Association is in keeping with its willingness to contribute to the full its resources in meeting public health needs. In the public health leaders in every province who have given generously of their time to the objectives of the Association, the organization possesses the necessary resources to organize an adequate recruitment program. It is only reasonable to expect that, as one of the important services to Federal, Provincial and local health authorities, this work will have the necessary financial support.

For physicians, a pamphlet entitled "Public Health as a Career" was prepared, outlining the field of public health and presenting its opportunities. Its publication is the first step in a program of recruitment. Through the co-operation

of the professors of preventive medicine, the pamphlet has been made available to members of the graduating classes in the medical colleges of Canada. Copies have been sent also to physicians serving as internes in hospitals.

#### *Meetings of the Association*

The Association's thirty-seventh annual meeting, held in Halifax during the last week of June, was one of the most successful in the Association's history. The Committee on Arrangements planned wisely and effectively, and great credit is due Dr. Allan R. Morton and his associates, Dr. D. J. Mackenzie, Dr. C. B. Stewart, Dr. J. S. Robertson, Dr. J. J. MacRitchie, and Mr. E. C. Thomas. The hospitality that is so characteristic of the Maritimes was generously extended, and Halifax, observing its Bicentenary, was in a holiday mood. A feature of the entertainment program was a cruise on H.M.C.S. "Haida", made possible by the Honourable the Minister of National Defence, Mr. Brooke Claxton, and the Flag Officer, Atlantic Coast, Royal Canadian Navy. Other highlights were the garden party, at which the members were guests of the Provincial Department of Public Health; the reception given by the City of Halifax Bicentenary Committee before the annual dinner; and the dinner itself, when Dr. P. S. Campbell, Deputy Minister of Health of Nova Scotia, was made an honorary life member of the Association. As the Honorary Treasurer points out in his report, the meeting was conducted at a charge to the Association of less than two hundred dollars.

The seventeenth annual Christmas meeting of the Association's Laboratory Section was held in Toronto on December 16 and 17. Thirty papers were presented at the three sessions and there was a registration of approximately one hundred.

#### *Examinations in Sanitary Inspection*

With the co-operation of Provincial and municipal health departments, university departments, and the Canadian Institute of Sanitary Inspectors, the annual examinations for the Certificate in Sanitary Inspection (Canada) were held in seven provincial centres—Halifax, Montreal, Toronto, Winnipeg, Regina, Edmonton, and Vancouver—on September 14, 15 and 16. Sixty-seven candidates were successful. Thirty-one candidates were enrolled for the 1949-50 session of the correspondence course in sanitary inspection, which opened on October 24 and continued for a twenty-four week period.

#### *French edition, Manual for Sanitary Inspectors*

In December, after more than a year of preparation, the Association issued a French edition of the *Manual for Sanitary Inspectors*. The task of translating the 228 pages of the English text was undertaken by members of the Ministry of Health of the Province of Quebec; and the Department of National Health and Welfare, Ottawa, generously arranged to have stencils made of the 266 pages of the French text. The material was mimeographed and assembled in the Association's office and copies were available on December 10th for the opening of a course in sanitary inspection given at the University of Montreal. There

has been a need for a French edition of this book, which has been available in English since 1937, and the Association gratefully acknowledges the co-operation of the Ministry of Health of Quebec and the Department of National Health and Welfare in making its publication possible.

WILLIAM MOSLEY, M.D., D.P.H.,  
*Honorary Secretary.*

#### REPORT OF THE HONORARY TREASURER

THE appended financial statement for the year ended December 31, 1949, presents expenditures of \$22,356.62 and revenue of \$26,101.60. An excess of revenue over expenditures amounting to \$3,744.98 is shown. This surplus represents, however, an unexpended balance in the grant made by the W. K. Kellogg Foundation to the Study Committee on Public Health Practice carried forward from 1948, and a further balance of \$1,442.69 from the Foundation's 1949 grant which will be used for the printing of the Study Committee's report.

The revenue of the Association is derived from membership fees, Journal subscriptions and Journal advertising, together with grants from the Federal and Provincial Departments of Health for services rendered. In 1949 the revenue included: subscriptions, \$5,594.71; advertising, \$5,911.36; and grants from the Federal Government and seven Provinces, \$10,800. A grant totalling \$7,081.89 from the W. K. Kellogg Foundation was provided for the expenses of the Study Committee on Public Practice. The section of the statement relating to the examinations and the correspondence course in sanitary inspection shows a surplus but this is due to the fact that administrative salaries pertaining to this work appear in the total salaries elsewhere in the statement.

The major expenditures relate to the printing and distribution of the Journal and to salaries.

It should be emphasized that the favourable balance shown gives a misleading impression of the Association's financial position. As has been stated in the report of the Executive Committee, your Honorary Treasurer, Dr. Baillie, resigned as Executive Director on October 31st. The Executive Committee considered that the Association's financial position did not permit the appointment of a senior full-time member to replace him. The Association was fortunate in having Dr. William Mosley, who had served for several years as Honorary Treasurer, accept the appointment of Honorary Secretary. In turn, Dr. Baillie assumed the office of Honorary Treasurer.

As the Association is at present functioning, expenditures are at a minimum. Through the interest of the School of Hygiene, University of Toronto, office accommodation is provided.

It is evident that the financial position of the Association calls for action by the members. The fee for membership, including a subscription for the Journal, is \$5.00 a year. Certain members receive the Journal without charge, the subscription fee of \$3.00 being paid by the Provincial Departments of Health, and membership is available to them for \$2.00. In those provinces in which provincial

public health associations have been established, joint membership is available.

A fee of \$5.00 for provincial and national membership and a subscription for the Journal is too small to provide for the work of the Association and of the affiliated provincial bodies. It was set at this low figure so that every public health worker in Canada might become a member. Obviously, if the work is to be successfully conducted and the Association not financially embarrassed, it is essential that *every* public health worker be a member; the Association cannot act effectively in the interests of the public health group unless those engaged in this field give their full support. It is imperative that in each province an active committee be organized to present to every public health worker the necessity of supporting the Canadian Public Health Association in its national work. This they can do in a number of the provinces through membership in their provincial health association.

As stated in the report of the Editor, the printing costs of the Journal amounted to \$3.75 per subscription in 1949. This fact, in the light of a membership fee of \$5.00, indicates that the Association must receive financial assistance, in the form of remuneration for services rendered, from the Federal and Provincial health authorities if the present services are to be continued and new responsibilities assumed. The substantial progress which has been made in placing before the official health agencies the services of the Association, and the payment for these services, has been presented in the report of the Executive Committee.

Thanks to the energetic leadership of the president, Dr. Allan R. Morton, and his associates in the health departments of the City of Halifax and the Province of Nova Scotia, the 1949 annual meeting was held in Halifax June 27-30 at a cost to the Association of less than two hundred dollars. The local committee left nothing undone to make the thirty-seventh annual meeting a notable one.

The Association is deeply indebted to the W. K. Kellogg Foundation for its continued interest and for the further grant made in support of the Study Committee on Public Health Practice. The contribution which the Foundation has made extends far beyond the work of the Committee.

J. H. BAILLIE, M.D., D.P.H.,  
*Honorary Treasurer.*

CANADIAN PUBLIC HEALTH ASSOCIATION  
BALANCE SHEET  
AS AT 31st DECEMBER, 1949

ASSETS

|   |            |                    |
|---|------------|--------------------|
| Cash on Hand.....                         |            | \$ 50.00           |
| Cash in Bank.....                         |            | 10,458.63          |
| Accounts Receivable .....                 | \$2,581.64 |                    |
| Less: Reserve for Doubtful Accounts ..... | 35.00      | 2,546.64           |
| Deposit with Postmaster .....             |            | 15.00              |
|   |            | <u>\$13,070.27</u> |

|   |                 |     |                    |
|---|-----------------|-----|--------------------|
| Canadian Journal of Public Health ..... | \$ 1,000.00     |     |                    |
| Office Equipment .....                  | \$1,073.09      |     |                    |
| Less: Reserve for Depreciation .....    | <u>1,073.09</u> | Nil | 1,000.00           |
| Prepaid Expenses .....                  |                 |     | <u>587.85</u>      |
|   |                 |     | <u>\$14,658.12</u> |

## LIABILITIES

|  |                 |                    |  |
|--|-----------------|--------------------|--|
| Accounts Payable .....   | \$ 1,822.73     |                    |  |
| Prepaid Subscriptions .....  | <u>458.23</u>   | \$ 2,280.96        |  |
| Surplus  |                 |                    |  |
| Balance as at 31st December, 1948 .....                                | \$11,335.36     |                    |  |
| Add  |                 |                    |  |
| Excess of Revenue over Expenditure for the year (See Schedule A) ..... | <u>3,744.98</u> |                    |  |
|  | \$15,080.34     |                    |  |
| Deduct   |                 |                    |  |
| Kellogg Foundation Surplus, 1948 .....                                 | <u>2,703.18</u> |                    |  |
| Balance as at 31st December, 1949 .....                                |                 | 12,377.16          |  |
|  |                 | <u>\$14,658.12</u> |  |

Submitted with our report of this date attached.

TORONTO, Ontario,  
15th May, 1950.

HILL, TESKEY & Co.,  
Chartered Accountants.

## SCHEDULE 'A'

CANADIAN PUBLIC HEALTH ASSOCIATION  
REVENUE ACCOUNT  
FOR THE YEAR ENDED 31st DECEMBER, 1949

## EXPENDITURES

|  |                 |                    |
|--|-----------------|--------------------|
| Printing .....   |                 | \$ 8,396.25        |
| Postage on Magazines and Mailing Cost .....  |                 | 605.60             |
| Honoraria .....  |                 | 105.00             |
| Salaries .....   |                 | 9,563.16           |
| Stationery and Office Supplies .....   |                 | 479.70             |
| Postage, Telephone and Express .....   |                 | 638.43             |
| Annual Meeting—Expenses .....  | \$1,204.36      |                    |
| —Receipts .....  | <u>1,026.28</u> | 178.08             |
| Travelling .....   |                 | 489.27             |
| Unemployment Insurance .....   |                 | 37.13              |
| Miscellaneous Expense .....  |                 | 710.54             |
| Provision for Depreciation—Office Equipment .....                                    |                 | 206.90             |
| Discount allowed and Bank Charges .....  |                 | 192.06             |
| Salary Survey .....  |                 | 332.53             |
| Sanitary Inspectors—Cost of Manuals .....  | \$1,186.47      |                    |
| —Sales of Manuals .....  | <u>764.50</u>   | 421.97             |
|  |                 | <u>\$22,356.62</u> |
| Excess of Revenue over Expenditure for the year transferred to Surplus Account ..... |                 | 3,744.98           |
|  |                 | <u>\$26,101.60</u> |

## REVENUE

|                                      |            |             |
|--------------------------------------|------------|-------------|
| Advertising .....                    | \$7,650.00 |             |
| Less: Commissions Paid .....         | 1,738.64   | \$ 5,911.36 |
| Subscriptions—less refunds .....     |            | 5,594.71    |
| Grants—Dominion of Canada .....      |            | 5,000.00    |
| —Province of Ontario .....           |            | 2,500.00    |
| —Province of Quebec .....            |            | 1,200.00    |
| —Province of New Brunswick .....     |            | 600.00      |
| —Province of British Columbia .....  |            | 400.00      |
| —Province of Manitoba .....          |            | 400.00      |
| —Province of Nova Scotia .....       |            | 300.00      |
| —Province of Saskatchewan .....      |            | 400.00      |
| —W. K. Kellogg Foundation Grant:     |            |             |
| Surplus from 1948 .....              | \$2,703.18 |             |
| Grant 1949 .....                     | 4,378.71   |             |
|                                      | \$7,081.89 |             |
| Expenditures:                        |            |             |
| Salaries .....                       | \$4,598.90 |             |
| Travelling .....                     | 884.85     |             |
| Office Equipment and Supplies .....  | 155.45     | 5,639.20    |
|                                      |            | 1,442.69    |
| Sanitary Inspectors' Section—        |            |             |
| Examinations—Revenue .....           | \$1,606.00 |             |
| *Cost .....                          | 538.84     | 1,067.16    |
| Correspondence Courses—Revenue ..... | \$1,519.04 |             |
| *—Cost .....                         | 487.53     | 1,031.51    |
| Reprints—Sales .....                 | \$1,107.40 |             |
| —Cost .....                          | 920.38     | 187.02      |
| Laboratory Section—Revenue .....     | \$ 449.35  |             |
| —Expense .....                       | 404.70     | 44.65       |
| Bond Interest .....                  |            | 22.50       |
|                                      |            | \$26,101.60 |

\*Excluding Salaries.

## REPORT OF THE EDITOR, CANADIAN JOURNAL OF PUBLIC HEALTH

THE IMPORTANCE of a journal in any field is seldom recognized until a reader has occasion to consult its pages over a period of years. The Canadian Journal of Public Health constitutes a year book of public health progress in Canada. It is a volume of no mean size, containing upwards of six hundred pages. Year by year its articles have reflected the progress of public health in its many fields and recorded changes in legislation, organization and administration. If the twelve issues were published annually as a separate volume, a price two or three times the subscription rate would be readily paid. Mention is made of this because readers of the JOURNAL may not be aware of the contribution which it is making to their daily work. The JOURNAL is now in its forty-first volume. Filling several library shelves, the volumes tell the story of public health through two world wars and a long period of financial depression. Only once, in December 1947, when a printers' strike prevented publication, has a monthly issue been missed. Throughout its long history the JOURNAL has been published by



the Association with the financial support furnished by an inadequate membership and subscription fee.

This question of support is most urgent. Printing costs are at least double those of pre-war years. Your editorial board has effected every possible economy. There is no charge against the JOURNAL for editorial services or office space. The printing and mailing charges last year amounted to \$9,000, or approximately \$3.75 for each subscription. The income from advertising was \$5,900 and from subscription and membership fees \$5,500. Thus when the printing and mailing charges were met, there remained from these three chief sources of revenue only \$2,400 to meet the general expenses of the Association. It is to be noted that the advertising revenue for 1950 will be considerably less than for 1949, owing to the discontinuance of certain advertising. The situation therefore is serious.

Through the co-operation of the Provincial Departments of Health, the JOURNAL is supplied to certain public health personnel without charge to the individual. This made possible the publication of the JOURNAL in past years, supplementing the revenue from other subscriptions and from advertising. If a fee of \$5.00 were available to the Association for all public health workers, the revenue would be sufficient to maintain the organization. However, there are many engaged in public health work who have not become members of the Association or subscribers to the JOURNAL, even though the membership fee for those who receive the JOURNAL through their Provincial Department of Health is only \$2.00.

An outstanding contributor to the JOURNAL during the past four years has been Dr. Fraser Brockington, County Medical Officer for the West Riding of Yorkshire, England. In the midst of his heavy responsibilities in administrative health work, Dr. Brockington has found time to prepare a series of brilliant and informative articles for Canadian readers. To him we owe a debt of special gratitude. We hope that it may be possible to have the pleasure of a visit from him on the occasion of an early meeting of the Association, when the many members who have valued his quarterly Letters may personally express their thanks to him. In the meantime, I would like to suggest that the resolutions committee at this annual meeting present a resolution conveying our thanks and appreciation.

R. D. DEFRIES, M.D., D.P.H., *Editor*.

#### REPORT OF THE COMMITTEE ON THE CERTIFICATION OF SANITARY INSPECTORS

IN 1934 the Association undertook the responsibility for establishing educational qualifications and standards of training for sanitary inspectors in Canada. This action was taken after several years of consideration of the need for improving the training and the status of sanitary inspectors and after consultation with provincial and federal health authorities. The Secretary of State approved of the Association's serving as an educational body and conducting examinations. The sixteen years' experience has confirmed the wisdom of establishing qualifications in Canada and improving training. During these years the Canadian Institute of Sanitary Inspectors has co-operated with the Association in the endeavour

to enable sanitary inspectors to perform more adequately the services in sanitation and to keep pace with the rapidly expanding field of health. For many years health officers and the public alike considered sanitary inspection to be the maintenance of sanitary services. Today there is a realization that sanitation means much more. As interpreted now, "cleanliness" would be more expressive of the service given. Cleanliness in food preparation and handling constitutes a broad field that requires increasing supervision and education; cleanliness in the community encompasses all the activities necessary to achieve proper environmental sanitation; rodent and pest control are new fields calling for supervision by competent inspectors; such fields as plumbing inspection require experienced, well-trained officers.

In establishing the qualifications and examinations, the Association recognized that the provincial health departments should have the determining voice in the qualifying of sanitary inspectors. At the same time, uniformity in standards among the provinces is important. The examinations consist of written papers, a field report, and an oral examination. The oral examination is conducted under the immediate direction of the provincial department of health, and candidates failing to meet the approval of the provincial examining board are not qualified by the Central Board of Registration and Examination. This provision, which was introduced in 1935 with the first examinations, has done much to assure a satisfactory standard. The examinations are conducted in the various provinces on the same days and the written papers are the same in all provinces. These papers are marked by a central board, which assures uniformity in marking. The co-operation of the provincial departments of health, which has been so generously given over the years, has made possible the carrying forward of this plan for the qualifying of sanitary inspectors.

What has been accomplished? Commencing in 1935, the examinations have been conducted each year and a total of 671 candidates have been awarded the Certificate in Sanitary Inspection (Canada). The services of sanitary inspectors have been extended and the quality of their work improved. The importance of the office of inspector has been more generally recognized and the salaries have been substantially increased.

To consider educational standards for various professional workers in public health, the Association has a Committee on Professional Education which is representative of the various fields of public health and has a group of eminent members. As the membership of this committee is national, there is a centrally located nucleus committee which presents its findings to the national committee for consideration and action. Four years ago a request was made by the Canadian Institute of Sanitary Inspectors that the educational requirement for registration for the examinations in sanitary inspection be further raised and that an additional and higher certificate in sanitary inspection be provided. It was pointed out that the provision of such a certificate would be an incentive to those engaged in this field to acquire additional training and would improve the quality of sanitary inspection. This request was referred to the nucleus committee of the Committee on Professional Education. After due consideration, the nucleus committee made certain recommendations which in the opinion of the members would fur-

ther advance the status of sanitary inspectors and improve the services. Their report was forwarded to the members of the Committee on Professional Education and to the Canadian Institute of Sanitary Inspectors. During the past year these recommendations have been studied by the Institute, and late in April of this year they expressed their views in a memorandum in which they recommended the raising of the secondary-school educational requirements and recognized the need for more adequate training, but were not in agreement with other recommendations. The memorandum has been reviewed by the nucleus committee but will require extended study. It will probably be early fall before the Committee on Professional Education will be in a position to formulate recommendations.

The time which has elapsed has afforded the opportunity for a review by the provincial departments of health, the Association, and the Institute of the requirements for training. There are differences of opinion among the groups mentioned about the raising of the secondary-school educational requirements; there is unanimity in the recognition that more adequate training must be provided and that the course of instruction, now given through correspondence, should be replaced, where possible, by formal instruction extending over several months. With the provision of the Professional Training Grant under the National Health Grants program, candidates in sanitary inspection may receive a substantial stipend to permit them to engage in studies over a maximum period of twelve months. This makes it possible for the candidate to obtain the field experience which is absolutely essential. Although progress has been made in several of the Provinces, the provision of formal courses of instruction presents a difficult problem. There should be at least four training centres in Canada. Probably these can best be provided through provincial departments of health, but at the present time the pressure of work associated with the provincial health surveys, the extension of health services, and the establishing of new departments, is placing a strain on the provincial departments beyond the resources of their present staffs. Progress in the provision of training courses must of necessity be slow.

Much has been accomplished in the decade and a half since the Association formed its Committee on the Certification of Sanitary Inspectors. Through continued co-operation, answers will be obtained to some of the problems which at the moment are perplexing, and important advances will be made.

A. E. BERRY, M.A.Sc., C.E., Ph.D., *Chairman.*

## EMPLOYMENT SERVICE

Advertisements regarding "positions available" and "personnel available" will be published in from one to four consecutive issues, depending upon the requirements of the agency or person concerned. They are limited to seventy words or less, with a confidential box number if desired. There is no charge for this service to members of the Association. Health agencies are charged a flat rate of \$10.00 for the advertisements (up to four consecutive issues) and for the service. The rate for non-members is \$5.00. The service includes confidential clearing of information between prospective employer and employee if desired.

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**Wanted: Public Health Nurses.** The Elgin - St. Thomas Health Unit invites applications for two vacancies in its nursing staff. The present minimum salary is \$1800.00 but suitable adjustments will be made for experience. Car allowance \$720.00 per year. Four weeks' vacation, cumulative sick leave, admission to pension plan after one year's service, and interest-free loan if necessary for purchase of car. Apply Supervisor of Nurses, City Hall, St. Thomas, Ontario.

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**Public Health Nurses:** Applications are invited from qualified public health nurses for generalized program. Revised basic salary, with allowance for experience, and annual increments. Cumulative sick leave. Pension Plan and Blue Cross Hospital Plan available if desired. Apply to A. E. Thoms, M.D., Director, Leeds and Grenville Health Unit, Victoria Building, Brockville, Ontario.

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**Public Health Nurses:** Applications are invited from qualified Public Health Nurses. Generalized program, minimum salary \$1900. with annual increments according to experience, liberal car allowance, good personnel policies. Apply to Dr. R. S. Peat, Medical Officer of Health, Stormont, Dundas and Glengarry Health Unit, 104 Second Street West, Cornwall, Ontario.

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**Wanted: Public Health Nurse** for the City of Owen Sound. Salary \$2000. to \$2400. according to experience, plus car allowance. Apply to M. S. Leslie, City Hall, Owen Sound, Ontario.

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**The University of Alberta** invites applications for the position of Professor of Preventive Medicine. Duties to start September 1, 1950. Details may be obtained from the Dean of the Medical Faculty, University of Alberta, Edmonton, Canada.

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**Applications are invited** for the position of Senior Public Health Nurse for the City of Stratford. They should be addressed to City Clerk L. R. Graham, Stratford, Ontario.

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